GLASGOW ATLAS SOFTWARE WORKSHOP

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SAFETY MATTERS

- Emergency exits and evacuation routes are indicated with the usual white on green signs

- Glasgow is quite untroubled by earthquakes or volcanoes

- The weather forecast is good this week — no sign of storms or floods

- Fires can happen at any time though

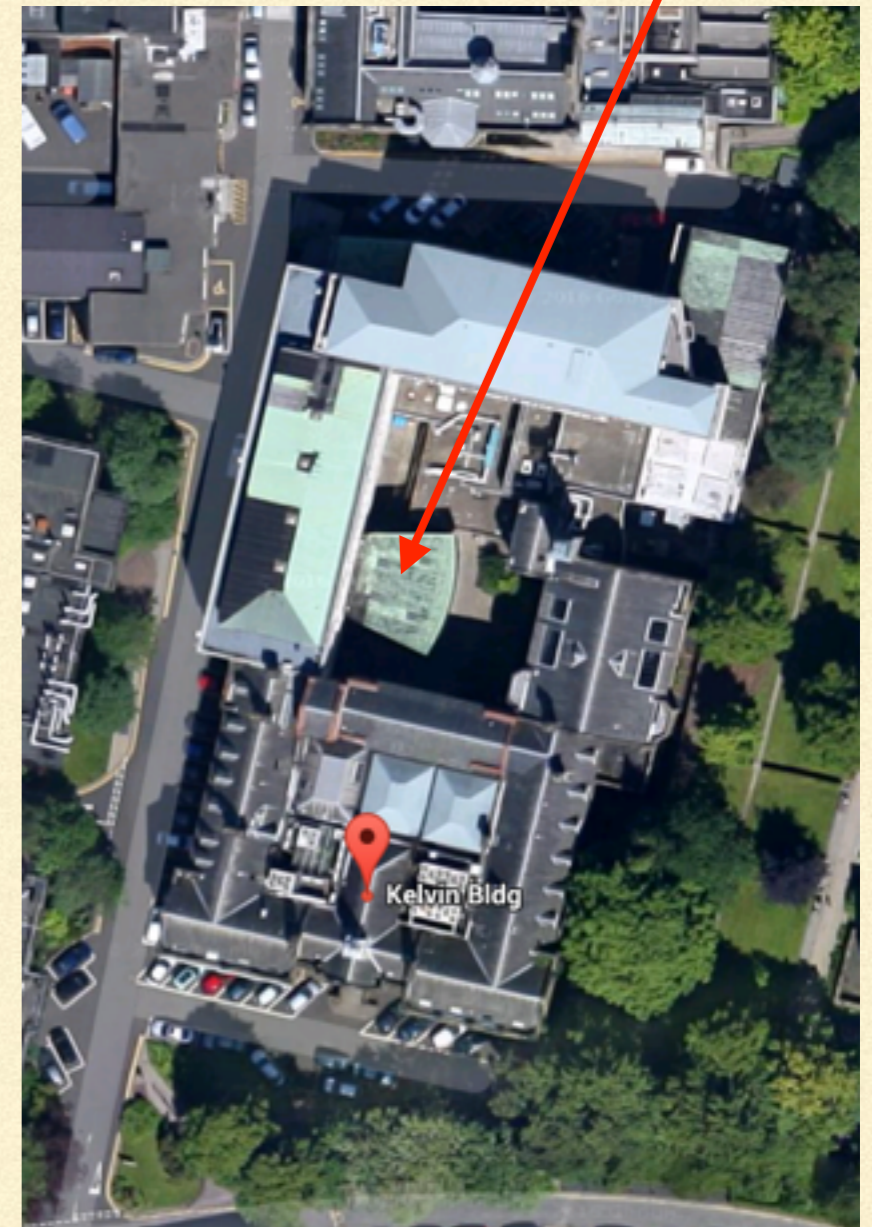 - Fire alarm is the obviously very loud siren

LOCAL ARRANGEMENTS

- If you need help with anything please get in touch with

  - Me

    - +44 (0)7799 310 257, graemes.cern@gmail.com

  - Our group secretary, Valerie Flood, Valerie.Flood@glasgow.ac.uk

    - Room 479, +44 (0)141 330 4702

  - Also, we are quite friendly around the department!

- Please look at the local guide on Indico for food, drink and places to visit

THE KELVIN BUILDING

You are here

- The Kelvin Building is actually two buildings grafted together

- This leads to some curiosities in access between different parts of the building

  - Just follow the signs to the Common Room (snack machines, coffee and Eduroam)

- We are in the new building all week

  - Level 2 Monday-Wednesday

  - Levels 3 and 4 Wednesday-Friday

    - Essentially all above Room 220 though

- Closest toilets are on Level 3, just off the main stairwell

NETWORKING

- There are two wireless networks we can use

  - Eduroam — coverage here, in 220, Common Room, extends reasonably well to Level 3

    - Usual authentication

  - KELVIN — coverage in all areas we will use

    - Authentication key: 14b74f (registers your MAC address until midnight)

  - https://indico.cern.ch/event/508341/page/7229-networking

- We have backup wired networking in Room 220

  - But you need to *register* your wired MAC address and use the University web proxy (http://wwwcache.gla.ac.uk/glasgow.pac)
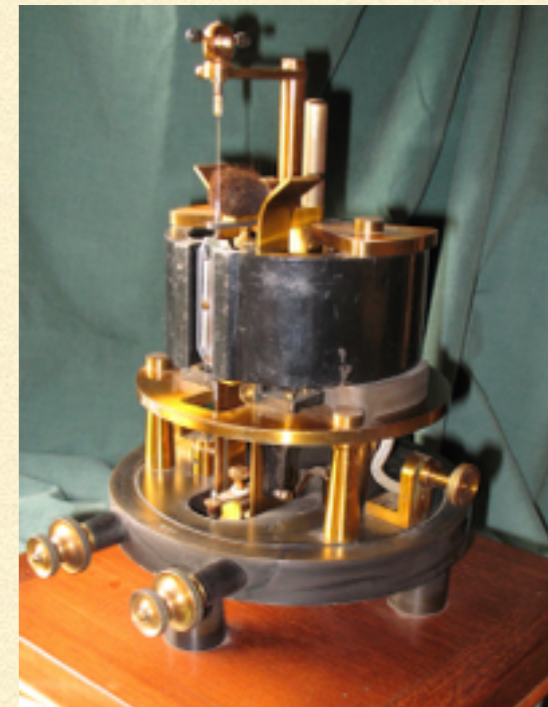
A BRIEF HISTORY OF THE UNIVERSITY

- Founded in 1451 by Papal Bull

  - Fourth oldest English speaking university in the World

- Part of Scotland's very strong tradition of education

- In 1870 moved to the present Gilmorehill Campus

  - Highlight is the mock gothic main building, which also houses the Hunterian Museum (self guided tour)

- Many famous alumni and faculty who played a key role in UK science and politics over the centuries

  - Adam Smith, Joseph Lister, James Watt, John Logie Baird, Nicola Sturgeon
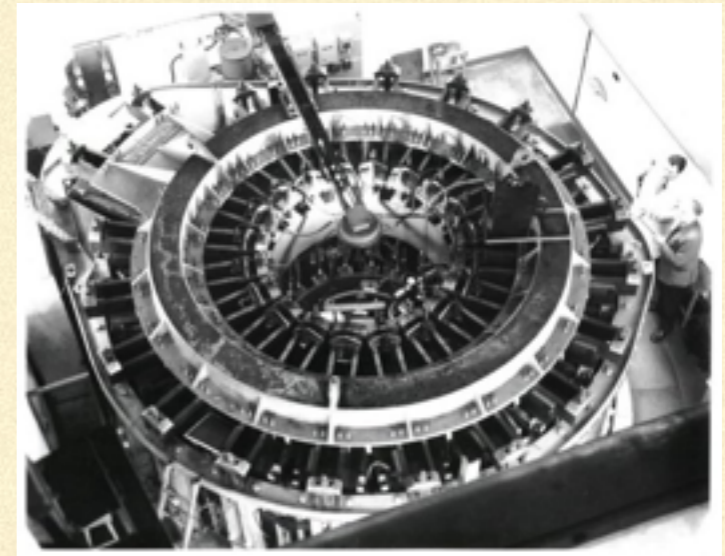
GLASGOW SCIENTISTS AND ALUMNI

- Lord Kelvin (William Thompson) was one of the towering figures of 19th Century Physics

  - Started studying at the University aged 10 in 1834 (bizarrely this was quite normal in those days)

  - Appointed Professor of Natural Philosophy at Glasgow in 1846

  - Proposed a universal temperature scale in 1848, postulating the existence of absolute zero

  - Provided critical calculations to arrive at the first successful trans-Atlantic submarine cable, laid in 1866

    - Bandwidth was one character every 3.5s

Mirror galvanometer

GLASGOW AND PARTICLE PHYSICS

- Glasgow started particle physics with a 300MeV electron synchrotron, led by Philip Dee (a student of Rutherford)

- Experiences, and the usual funding crises, led to heavier UK involvement with CERN

- As well as a long history of DESY involvement

- David Saxon was a key figure in early proposals for the LHC and ATLAS experiments, contributing to early ECFA studies

- Ken Smith took on the role of CB chair

SESSION 2: REVIEW OF PHYSICS AND DETECTORS FOR HIGH-LUMINOSITY HADRON COLLIDERS

Hadron–hadron physics at high energy and luminosity, *I. Hinchliffe*

The tasks of tracking and vertex location at future hadron colliders, *D.H. Saxon*

Aspects of jets and calorimetry at future hadron colliders, *P. Jenni*

ECFA 89-124

GLASGOW AND PARTICLE PHYSICS COMPUTING

- Glasgow University was the first Scottish academic institution to have an electronic computer, 1957

  - Automated analysis of bubble chamber photographs

- Project leader of the GridPP project (UK grid project) was Tony Doyle, our current head of group

  - GridPP still led from Glasgow by Dave Britton

- Glasgow has one of the largest and most successful ATLAS Tier-2 centres

- Glasgow made significant contributions to ATLAS software too, particularly in the infrastructure area and an analysis frameworks

- Let's carry on that tradition with a braw software workshop